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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/812,490	03/30/2004	Phillip J. Roux	EMC-04-010	3257

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EMC CORPORATION
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EXAMINER

BAE, JI H

ART UNIT PAPER NUMBER

2115

DATE MAILED: 08/23/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/812,490

Applicant(s)

ROUX ET AL.

Examiner

Ji H. Bae

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 March 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-36 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-36 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date: _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date: _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 2-4, 6, 7, 11-17, 19-21, 28-30, 32, and 33 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 2 recites the limitation "the first power source" in line 5 and "the second power source" in line 6. There is insufficient antecedent basis for this limitation in the claim. The parent claim has previously recited a first and second power supply.

Claims 3 and 4 are rejected by virtue of their dependency.

Claims 6, 7, 11-17, 19-21, 28-30, 32, and 33 are rejected on similar grounds.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1, 2, 5, 6, 11-13, 18, 19, 22, 23, 26-28, 31, and 32 are rejected under 35 U.S.C. 102(e) as being anticipated by Duncan et al., U.S. Patent No. 6,618,821 B1.

Regarding claim 1, Duncan teaches [Fig. 1, col. 4, lines 10-18]:

a disk drive assembly including a plurality of disk drives [RAID shelf 112];

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a first processor for controlling access to the disk drive assembly [RAID controller 108];
a second processor for controlling access to the disk drive assembly [RAID controller 111];

a first power supply for supplying power to the first processor and to the disk drive assembly [power supply 120];

a second power supply for supplying power to the second processor and to the second disk drive assembly [power supply 121].

Duncan teaches that the RAID shelf is comprised of several disk drives. Duncan also teaches that power supplies 120 and 121 power both the RAID shelf and the RAID controllers.

Regarding claim 2, Duncan teaches that the power supplies 120 and 121 are both connected to the RAID shelf, which is comprised of a SCSI bus [first bus], and that the power supplies provide power to the RAID shelf [first voltage output].

Regarding claim 5, Duncan teaches that the first and second power supplies each include a first voltage output, wherein the first voltage output for the first power supply provides power to the first processor, and the first voltage output for the second power supply provides power to the second processor [Fig. 1].

Regarding claim 6, Duncan teaches that the power supplies 120 and 121 are both connected to the RAID shelf, which is comprised of a SCSI bus [first bus], and that the power supplies provide power to the RAID shelf [second voltage output].

Claim 11 incorporates the limitations of claims 1 and 2, and is rejected on similar grounds.

Regarding claim 12, Duncan teaches a second processor with a second power source.

Claim 13 incorporates the limitations of claim 5, and is rejected on similar grounds.

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Regarding claim 18, Duncan teaches a circuit subsystem [RAID shelf 112], a first and second device for controlling access to the circuit subsystem [RAID controller 108 and 111], and a first and second power supply to supply power to the first device, second device, and circuit subsystem [p/s 120 and 121].

Claim 19 incorporates the limitations of claim 2, and is rejected on similar grounds.

Regarding claims 22 and 23, Duncan teaches the system recited in claims 1 and 2. Duncan also teaches the method implemented by the system.

Regarding claim 26, Duncan teaches supplying power to the disk drive assembly with one of the first and second power supplies when the other of the first and second power supplies becomes disabled [col. 1, lines 45-50].

Regarding claim 27, Duncan teaches a disk drive assembly [RAID shelf], a first and second circuit subsystem [RAID controllers], and a first and second power supply [p/s 120 and 121] for supplying power to the disk drive assembly and circuit subsystems.

Claim 28 incorporates the limitations of claim 2, and is rejected on similar grounds.

Claims 31 and 32 incorporate the limitations of claims 5 and 6, and are rejected on similar grounds.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 8-10, 15-17, and 34-36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Duncan in view of Corcoran et al., U.S. Patent No. 2004/0070908 A1.

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Regarding claims 8-10, 15-17, and 34-36, Duncan teaches the system of claim 1, but does not teach a protection circuit.

Corcoran teaches an overcurrent protection circuit for use with a power supply and a disk drive [Fig. 2, paragraph 0023].

It would have been obvious to one of ordinary skill in to combine the teachings of Duncan and Corcoran by adding the overcurrent protection circuit of Corcoran to the system of Duncan. Corcoran teaches that the overcurrent protection circuit is used in the context of providing power to a disk drive, thus implying the combination with Duncan. The teachings of Corcoran would improve the system of Duncan by providing protection against power faults. Additionally, since Duncan teaches two power supplies, it would have been obvious to apply the teachings of Corcoran to both power supplies of Duncan.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

Alft, U.S. Patent No. 5,881,215;

Brant et al., U.S. Patent No. 5,708,771;

Linde, U.S. Patent No. 5,745,670;

Beneditz et al., U.S. Patent No. 6,856,045 B1;

Butka et al., U.S. Patent No. 6,735,704 B1;

Lui, U.S. Patent No. 5,325,363;

Cooney et al., U.S. Patent No. 6,504,730 B1;

Goerke et al., U.S. Patent No. 6,943,463 B2;

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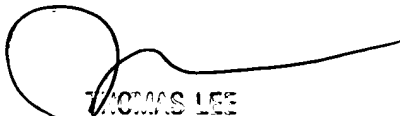
Farr, U.S. Patent No. 5,088,081.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ji H. Bae whose telephone number is 571-272-7181. The examiner can normally be reached on Monday-Friday, 10 am to 6:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas Lee can be reached on 571-272-3667. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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